## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 270-06Application Serial Number: 270-06

ENTERED



**IFWP** 

RAW SEQUENCE LISTING DATE: 02/10/2006
PATENT APPLICATION: US/10/566,886 TIME: 09:20:25

Input Set : A:\14028.0295U2.txt

Output Set: N:\CRF4\02102006\J566886.raw

```
4 <110> APPLICANT: NEVILLE, David
             WOO, Jung-Hee
             LIU, Yuan-Yi
     6
      8 <120> TITLE OF INVENTION: METHODS FOR EXPRESSION AND PURIFICATION
             OF IMMUNOTOXINS
     11 <130> FILE REFERENCE: 14028.0295U2
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/566,886
C--> 14 <141> CURRENT FILING DATE: 2006-02-01
     16 <150> PRIOR APPLICATION NUMBER: PCT/US04/24786
     17 <151> PRIOR FILING DATE: 2004-08-02
     19 <150> PRIOR APPLICATION NUMBER: 60/491,923
     20 <151> PRIOR FILING DATE: 2003-08-01
     22 <160> NUMBER OF SEO ID NOS: 35
     24 <170> SOFTWARE: FastSEQ for Windows Version 4.0
     26 <210> SEQ ID NO: 1
     27 <211> LENGTH: 22
     28 <212> TYPE: PRT
     29 <213> ORGANISM: H. sapiens
     31 <400> SEQUENCE: 1
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     34 Ile Pro Thr Ala Arg Arg
     35
                    20
     37 <210> SEQ ID NO: 2
     38 <211> LENGTH: 22
     39 <212> TYPE: PRT
     40 <213> ORGANISM: M. musculus
     42 <400> SEQUENCE: 2
     43 Asp Val Thr Leu His Ala Asp Ala Ile His Arg Gly Gly Gln Ile
     44 1
                                                                15
                        5
                                            10
     45 Ile Pro Thr Ala Arg Arg
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     48 <210> SEQ ID NO: 3
     49 <211> LENGTH: 22
     50 <212> TYPE: PRT
     51 <213> ORGANISM: R. norvegicus
     53 <400> SEQUENCE: 3
     54 Asp Val Thr Leu His Ala Asp Ala Ile His Arg Gly Gly Gln Ile
     55 1
                         5
                                            10
     56 Ile Pro Thr Ala Arg Arg
                    20
     59 <210> SEQ ID NO: 4
     60 <211> LENGTH: 22
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61 <212> TYPE: PRT
63 <213> ORGANISM: C. qriseus
65 <400> SEQUENCE: 4
66 Asp Val Thr Leu His Ala Asp Ala Ile His Arg Gly Gly Gln Ile
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                   5
68 Ile Pro Thr Ala Arg Arg
69
        20
71 <210> SEQ ID NO: 5
72 <211> LENGTH: 22
73 <212> TYPE: PRT
74 <213> ORGANISM: D. melanogaster
76 <400> SEQUENCE: 5
77 Asp Val Thr Leu His Ala Asp Ala Ile His Arg Gly Gly Gln Ile
                                      10
78 1
                  5
79 Ile Pro Thr Thr Arg Arg
              20
82 <210> SEQ ID NO: 6
83 <211> LENGTH: 22
84 <212> TYPE: PRT
85 <213 > ORGANISM: C. elegans
87 <400> SEQUENCE: 6
88 Asp Val Thr Leu His Ala Asp Ala Ile His Arg Gly Gly Gln Ile
                   5
                                     10
90 Ile Pro Thr Ala Arg Arg
              20
91
93 <210> SEQ ID NO: 7
94 <211> LENGTH: 22
95 <212> TYPE: PRT
96 <213> ORGANISM: S. pombe
98 <400> SEQUENCE: 7
99 Asp Val Val Leu His Ala Asp Ala Ile His Arg Gly Gly Gln Ile
100 1
                   5
101 Ile Pro Thr Ala Arg Arg
102
104 <210> SEQ ID NO: 8
105 <211> LENGTH: 22
106 <212> TYPE: PRT
107 <213> ORGANISM: P. pastoris
109 <400> SEQUENCE: 8
110 Asp Val Thr Leu His Ala Asp Ala Ile His Arg Gly Gly Gln Val
111 1
            5
                                       10
112 Ile Pro Thr Met Lys Arg
113
                20
115 <210> SEQ ID NO: 9
116 <211> LENGTH: 22
117 <212> TYPE: PRT
118 <213> ORGANISM: S. cerevisiae
120 <400> SEQUENCE: 9
121 Asp Val Thr Leu His Ala Asp Ala Ile His Arg Gly Gly Gln Ile
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Input Set : A:\14028.0295U2.txt

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122	1 5		10		15	
123	Ile Pro Thr Met Arg Arg	g				
124	20					
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	<211> LENGTH: 66					
128	<212> TYPE: DNA					
129	<213> ORGANISM: Artificial Sequence					
	<220> FEATURE:					
132	<223> OTHER INFORMATION	_	ion of Arti	ificial Sequ	ence; note =	
133	synthetic construct					
	<400> SEQUENCE: 10					
136	gatgttaccc tgcacgccga	tgctatccac	cgccgcggag	gacaagtcat	tccaaccatg	60
	aagaga					66
139	<210> SEQ ID NO: 11					
140	<211> LENGTH: 223					
141	<212> TYPE: DNA					
142	<213> ORGANISM: Artific	cial Sequer	ice			
	<220> FEATURE:					
145	<223> OTHER INFORMATION	N: Descript	ion of Arti	ificial Sequ	ence; note =	
146	synthetic constr	uct				
148	<400> SEQUENCE: 11					
	actttgaagt tcttaatttt					60
	aaatgggtat gtgtttttt					120
151	tcgatcagat gcgatccctt	atggacaagg	tgtccaacgt	ccgtaacatg	tcggttattg	180
152	cccacgttga tcacggtaag	tccactttaa	ctgactccct	ggt		223
154	<210> SEQ ID NO: 12					
155	<211> LENGTH: 250					
156	<212> TYPE: DNA					
157	<213> ORGANISM: Artific	cial Sequer	ice			
	<220> FEATURE:					
160	<223> OTHER INFORMATION		ion of Art:	ificial Sequ	ence; note =	
161	synthetic constr	uct				
	<400> SEQUENCE: 12					
	actttgaagt tcttaatttt					60
	atgtgttttt ttatagttca					120
	taacatctcc tctagttaac		-			180
	ccaacgtccg taacatgtcg	gttattgccc	acgttgatca	cggtaagtcc	actttaactg	240
	actccctggt					250
	<210> SEQ ID NO: 13					
	<211> LENGTH: 2601					
	<212> TYPE: DNA					
173	<213> ORGANISM: Artificial Sequence					
-	<220> FEATURE:					
176	<223> OTHER INFORMATIO	<del>-</del>	tion of Art:	ificial Sequ	ence; note =	
177						
	<400> SEQUENCE: 13					
	atggttaact tcactgtcga					60
	aacatgtcgg ttattgccca					120
182	caacgtgccg gtattatttc	tgctgccaag	gctggtgagg	cccgtttcac	tgatactaga	180

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Output Set: N:\CRF4\02102006\J566886.raw

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240
183 aaggacgagc aagagagag tatcaccatc aagtctaccg ccatttcttt gtactctgag
                                                                           300
184 atggqtqacq acqatqtcaa qqaqatcaaq cagaagactg aaggtaacag tttccttatc
                                                                           360
185 aacttaattg actccccagg tcacgttgac ttctcttctg aggtcactgc tgctctgcgt
186 gttactgacg gtgctttggt cgtcgttgac tgtgttgaag gtgtctgtgt tcaaactgag
                                                                           420
                                                                           480
187 acceptitize gicaagetit gggtgaaaga atcaagecag tigitgicat taacaaggte
188 gaccgtgctc ttttggagtt gcaagttacc aaggaggacc tgtaccagtc tttcgctaga
                                                                           540
                                                                           600
189 accgtcgagt ccgtaaacgt cgttatcgct acttacactg acaagaccat tggtgacaac
                                                                           660
190 caagtetace cagaacaggg tacegteget tteggtteag gtetgeaegg atgggettte
191 accepttagac agttcgccac tagatactcc aagaagttcg gtgttgacag aatcaagatg
                                                                           720
192 atggagcgtc tgtggggaga ctcttacttc aacccaaaga ccaagaaatg gaccaacaag
                                                                           780
                                                                           840
193 gacaaggacg ccgctggaaa gcctttggag cgtgccttca acatgttcgt tttggaccct
                                                                           900
194 atcttccgtc tgtttgctgc catcatgaac ttcaagaagg atgaaattcc agttctgttg
                                                                           960
195 gagaaattgg agatcaacct gaagcgtgag gagaaggagt tggagggtaa ggctcttttg
                                                                          1020
196 aaggttgtca tgagaaagtt cttgccagct gccgacgctt tgttggagat gattgttctt
                                                                          1080
197 cacctgccat ctccagtcac cgctcaagct tacagagccg agactttgta cgaaggtcca
198 tetgatgace aattetgeat tggtateaga gagtgtgace etaaggetga getgatggtt
                                                                          1140
                                                                          1200
199 tacatttcca agatggtgcc aacctccgac aaaggtagat tctacgcctt cggtcgtgtt
                                                                          1260
200 ttctccggta ctgttaagtc cggtcaaaag gtcagaatcc aaggtcctaa ctacgttcca
201 ggtaagaagg aggacttgtt catcaaggct gttcaaagga ctgttttgat gatgggaaga
                                                                          1320
202 acceptegage ctattgacga teteceaget getaacatte tegestattet geestategae
                                                                          1380
203 cagttettge tgaagtetgg tactettact accaaegaag cegeteacaa catgaaggtg
                                                                          1440
204 atgaaattet etgtetetee agttgtgeaa gttgeegttg aggteaagaa egetaatgat
                                                                          1500
205 ctgcccaagt tggttgaggg tctgaagcgt ttgtccaagt ctgacccatg tgttttaacc
                                                                          1560
206 tacateteeg agtetggtga geacattgtt getggtaetg gtgagetgea ettggaaate
                                                                          1620
207 tgtttgcaag atctgcaaga cgaccacgct ggtgtccctc tgaagatttc tcctccagtt
                                                                          1680
208 gttacctacc gtgagactgt cactaacgaa tcttccatga ctgccctgtc caagtctcag
                                                                          1740
209 aacaagcata acagaattta cctgaaggct caaccaattg acgaggaatt gtctttggct
                                                                          1800
210 atcgaagaag gtaaggttca cccaagagac gactttaaag ccagagccag aatcatggct
                                                                          1860
211 gatgaatacg gttgggacgt cactgatgcc agaaagatct ggtgtttcgg tccagacggt
                                                                          1920
212 actgqtgcca acttaqttgt tgaccagtct aaggctgtcc aatacttgca cgagatcaag
                                                                          1980
213 gactctgttg ttgccggttt ccaattggct accaaggaag gtccaatttt gggagaaaac
                                                                          2040
214 atgagatecg teagagteaa eatettggat gttaccetge acgeegatge tatecacaga
                                                                          2100
215 ggtggaggac aagtcattcc aaccatgaag agagttacct acgccgcctt cctgttggct
                                                                          2160
216 gagecageta tecaggagee tatettettg gtggagatee aatgteeaga gaatgeeatt
                                                                          2220
217 ggtggtatet aetetgtttt gaacaagaag agaggteaag ttatetetga ggaacaaaga
                                                                          2280
218 ccaggtaccc cattgttcac tgtcaaagct tacttgccag ttaacgagtc attcggtttc
                                                                          2340
219 accggtgaac tgagacaagc taccgctggt caagctttcc cacagatggt gttcgaccac
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220 tgggccaaca tgaatggtaa cccattggac ccagcctcca aggtcggtga gattgttctt
                                                                          2460
221 gctgccagaa agagacaggg tatgaaggag aacgttcctg gttatgaaga gtactacgac
                                                                          2520
                                                                          2580
222 aaqttqtaaq cttaatqttt cattaactta tttgtgtcgt tcgtatgtct atttacgtac
                                                                          2601
223 ttaattcaqt qtattqttqt t
225 <210> SEQ ID NO: 14
226 <211> LENGTH: 9
227 <212> TYPE: PRT
228 <213> ORGANISM: Artificial Sequence
230 <220> FEATURE:
231 <223> OTHER INFORMATION: Description of Artificial Sequence; note =
          synthetic construct
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234 <400> SEQUENCE: 14

RAW SEQUENCE LISTING DATE: 02/10/2006
PATENT APPLICATION: US/10/566,886 TIME: 09:20:25

Input Set : A:\14028.0295U2.txt

Output Set: N:\CRF4\02102006\J566886.raw

235 Ala His Val Asp His Gly Lys Ser Thr 238 <210> SEQ ID NO: 15 239 <211> LENGTH: 13 240 <212> TYPE: PRT 241 <213> ORGANISM: Artificial Sequence 243 <220> FEATURE: 244 <223> OTHER INFORMATION: Description of `Artificial Sequence; note = synthetic construct 247 <400> SEQUENCE: 15 248 Asp Glu Gln Glu Arg Gly Ile Thr Ile Lys Ser Thr Ala 249 1 251 <210> SEQ ID NO: 16 252 <211> LENGTH: 896 253 <212> TYPE: PRT 254 <213> ORGANISM: Artificial Sequence 256 <220> FEATURE: 257 <223> OTHER INFORMATION: Description of Artificial Sequence; note = synthetic construct 260 <400> SEQUENCE: 16 261 Ala Gly Ala Asp Asp Val Val Asp Ser Ser Lys Ser Phe Val Met Glu 5 263 Asn Phe Ala Ser Tyr His Gly Thr Lys Pro Gly Tyr Val Asp Ser Ile 20 265 Gln Lys Gly Ile Gln Lys Pro Lys Ser Gly Thr Gln Gly Asn Tyr Asp 40 267 Asp Asp Trp Lys Gly Phe Tyr Ser Thr Asp Asn Lys Tyr Asp Ala Ala 55 269 Gly Tyr Ser Val Asp Asn Glu Asn Pro Leu Ser Gly Lys Ala Gly Gly 271 Val Val Lys Val Thr Tyr Pro Gly Leu Thr Lys Val Leu Ala Leu Lys 85 273 Val Asp Asn Ala Glu Thr Ile Lys Lys Glu Leu Gly Leu Ser Leu Thr 105 100 275 Glu Pro Leu Met Glu Gln Val Gly Thr Glu Glu Phe Ile Lys Arg Phe 125 115 120 277 Gly Asp Gly Ala Ser Arg Val Val Leu Ser Leu Pro Phe Ala Glu Gly 135 279 Ser Ser Ser Val Glu Tyr Ile Asn Asn Trp Glu Gln Ala Lys Ala Leu 150 155 280 145 281 Ser Val Glu Leu Glu Ile Asn Phe Glu Thr Arg Gly Lys Arg Gly Gln 170 165 283 Asp Ala Met Tyr Glu Tyr Met Ala Gln Ala Cys Ala Gly Asn Arg Val 185 287 Arg Arg Ser Val Gly Ser Ser Leu Ser Cys Ile Asn Leu Asp Trp Asp 200 195 289 Val Ile Arg Asp Lys Thr Lys Thr Lys Ile Glu Ser Leu Lys Glu His 215 290 291 Gly Pro Ile Lys Asn Lys Met Ser Glu Ser Pro Ala Lys Thr Val Ser

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 02/10/2006
PATENT APPLICATION: US/10/566,886 TIME: 09:20:26

Input Set : A:\14028.0295U2.txt

Output Set: N:\CRF4\02102006\J566886.raw

## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:19; Xaa Pos. 2,3
Seq#:35; N Pos. 7,15

## VERIFICATION SUMMARY

DATE: 02/10/2006

PATENT APPLICATION: US/10/566,886

TIME: 09:20:26

Input Set : A:\14028.0295U2.txt

Output Set: N:\CRF4\02102006\J566886.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:432 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0

L:626 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:35

L:631 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0